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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,697	10/31/2001	Frank J. Kronzer	NPI-14 (16326.1)	2526
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			ART UNIT 1774	PAPER NUMBER
			MAIL DATE 09/20/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/003,697

**Applicant(s)**

KRONZER, FRANK J.

**Examiner**

Tamra L. Dicus

**Art Unit**

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 43-51, 58, 64 and 66-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 58 and 66-72 is/are allowed.
- 6) ☒ Claim(s) 43-51 and 64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09-06-07</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 43 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "appreciably" is broad and indefinite as the specification does not provide a definition to the metes and bounds of the phrase. In order to determine infringement of the present claims, one necessarily would need to determine with a reasonable degree of certainty the scope of the phrase "does not appreciably flow." Applicant has failed to provide any such guidance, such as a definition and, accordingly, this phrase renders the scope of the claims unclear.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 43-47 and 64 are rejected under 35 U.S.C. 102(e) as being anticipated by Hare.

Hare teaches a heat transfer material comprising a base substrate (11, FIG. 1 and associated text); a release coating layer (8:45-50), and a transferable portion (12, FIG. 1 and associated text) overlying the base substrate; wherein the transferable portion is comprised of crosslinked polymer ethylene-methacrylic acid copolymer (9:43-62) layer in two or more layers (13:10-20, equivalent to crosslinked polymer and printable layers) the transfer layers are melt-flowable at a transfer temperature. Hare also teaches a release layer is also used in place of the melt-transfer layer of referenced Kronzer '990 (7:40-45). Hare discloses the support materials are of cellulose acetate films and papers (13: 48-65) per instant claim 47. Instant claims 43-44 and 47 are addressed.

While Hare teaches release layers and separation of the transfer layer from the support is an absolute requirement (13:55-60), Hare does not expressly teach a "peelable" film. However, because the transfer layers are separable from the support, and are used in two or more layers, and also teaches use of three layers (13:19-20), the third layer serves as a peelable film because it is of the same ethylene-methacrylic acid copolymer (includes copolymers of olefins, methacrylic acid monomers per instant claim 44) and thus expects to function as "peelable".

Hare teaches the release layer, and its composition of ethylene-acrylic acid copolymer (7:45-50), and a wax addition (7:50-65, release agent) per instant claims 45-46.

The results from causing the peelable film to melt and flow (claim 64) are inherent as the same materials are employed.

Hare teaches the transfer layer may comprise ink modifiers such as Polyox®, which is a white granular powder which functions as a colorant (8:58-60, Example 8, 9:35-43), and

Art Unit: 1774

therefore considered to be an opacifying material. Because the same materials are employed, the flowing degree properties are inherent.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 48-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hare in view of Ho.

Hare is referenced above.

Hare does not expressly disclose the transfer layers include opacifying material having a pigment and a crosslinker as per instant claims 48-51, while teaching the transfer layer may comprise ink, which is known to provide color through a pigment (8:58-60).

Ho teaches crosslinking agents epoxy and polyfunctional aziridine are incorporated with acrylic polymers in thermal transfer media in ink compositions containing white pigment in one or two continuous or discontinuous layers (col. 3, lines 28-45, col. 4, lines 1-21 and 55-68, and col. 5, lines 1-5, FIG. 1 and 2) serving to adjust melt flow characteristics (Examples and Abstract).

It would have been obvious to one of ordinary skill in the art to have modified the heat transfer of Kronzer to have included crosslinking agents epoxy and polyfunctional aziridine incorporated with acrylic polymers in thermal transfer media containing white pigment in a

Art Unit: 1774

continuous or discontinuous layers as claimed because the composition serves to adjust melt flow characteristics (col. 3, lines 28-45, col. 4, lines 1-21 and 42-68, and col. 5, lines 1-5, FIG. 1 and 2, Examples and Abstract of Ho).

### ***Allowable Subject Matter***

Claims 58 and 66-72 are allowed.

The following is an examiner's statement of reasons for allowance: The applied prior art does not teach or suggest a method of forming an image-bearing coating on a surface wherein the method comprises removing the non-transferable portion materials and overall structure order and placing the peelable film on a surface as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Response to Arguments***

Applicant's arguments filed 07-05-07 have been fully considered but they are not persuasive.

Applicant argues Hare does not teach an opacifying material but an ink modifier. However, Hare explicitly teaches ink modifiers such as Polyox® in Example 8, which is an opacifying material because it is a white granular colorant powder. See the product description of Polyox® made by Dow Chemical Co, listed on the 892.

Art Unit: 1774

Applicant argues the inherent properties of not appreciably flowing, alleging Hare does not teach this, however, because the materials are the same, the same characteristics are expected. With regard to the claimed flowing degree, when the claimed and prior art products are identical or substantially identical in structure or are produced by identical or a substantially identical processes, a *prima facie* case of either anticipation or obviousness will be considered to have been established over functional limitations that stem from the claimed structure. *In re Best*, 195 USPQ 430, 433 (CCPA 1977), *In re Spada*, 15 USPQ2d 1655, 1658 ( Fed. Cir. 1990). The *prima facie* case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed products. *In re Best*, 195 USPQ 430, 433 (CCPA 1977). When the reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention but has basis for shifting the burden of proof to applicant as in *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980). See MPEP §§ 2112- 2112.02.

Applicant further argues that Hare does not disclose two different crosslinked polymer layers that do not appreciably flow, however, Applicant has not claimed two different crosslinked polymer layers as argued. Moreover to the do not appreciably flow limitation, Applicant has not claimed it won't absolutely flow, so the claim still reads on polymer material flowing at a transfer temperature. Applicant has not provided any set degree or temperature to distinguish between flowing and 'appreciably flowing', as this choice in language is broad. Applicant is welcomed to amend the claim to make this distinction (see page 10, lines 4-10, to the specific melt flow indices). Applicant argues a third layer is not taught, however, Hare

Art Unit: 1774

teaches a transferable portion of crosslinked ethylene-methacrylic acid copolymer in two or more layers, which means a third layer is present. Applicant also points to Hare's teaching of melting below 180 degrees C, however, Applicant has not claimed a quantitative value. Therefore, the claims still read on Hare.

Applicant's argue Kronzer not showing a crosslinked polymer layer at a flow as claimed, however, Hare, the primary reference, was used to address the crosslinked polymer layers as set forth above.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



Art Unit: 1774

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tamra L. Dicus  
Examiner  
Art Unit 1774

September 6, 2007



MILTON I. CANO  
SUPERVISORY PATENT EXAMINER